



Air Quality Permitting Statement of Basis

September 17, 2003

Tier I Operating Permit Amendment T1-030319

Agrium/Nu-West Industries, Soda Springs

AIRS Facility No. 029-00003

Prepared by:

*Mike Simon, Permit Coordinator
AIR QUALITY DIVISION*

FINAL

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
CO	carbon monoxide
EPA	Environmental Protection Agency
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	Kilometer
NAAQS	National Ambient Air Quality Standard
NESHAP	Nation Emission Standards for Hazardous Air Pollutants
NO _x	nitrogen oxides
P ₂ O ₅	Phosphorus pentoxide
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PPA	purified phosphoric acid
PTE	potential to emit
PTC	permit to construct
SIC	Standard Industrial Classification
SO ₂	sulfur dioxide
SPA	super phosphoric acid
T/yr	tons per year
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to document the revisions made to Tier I Operating Permit No. 029-00003, issued on October 28, 2002 to Nu-West Industries, Inc; Agrium Conda Phosphate Operations (Agrium). This memorandum specifically documents only the administrative amendment changes to the Tier I permit. For information regarding the technical basis for the original issuance of the Tier I permit, please refer to the technical memorandum dated July 24, 2002.

2. FACILITY DESCRIPTION

The Agrium facility produces multiple fertilizer based products. The facility's primary product is in a liquid fertilizer product called Super Phosphoric Acid (SPA). SPA is produced by concentrating phosphoric acid to a level of 68-72% P₂O₅. SPA accounts for approximately 50% of the facility's total production volume. SPA is sold to customers where it is then upgraded, mixed or blended with other nutrients, pesticides and or herbicides before it is applied. Other products produced at the facility include Merchant Grade Acid, Dilute Phosphoric Acid, Purified Phosphoric Acid and Dry Granular Products.

The Conda Plant is located close to sources of phosphate rock, sulfuric acid and sulfur, which are the principle raw materials used in the manufacturing process. Phosphoric acid is produced through the acidulation of ground phosphate rock with sulfuric acid, water and recycled phosphoric acid in reaction tanks. Sulfuric acid reacts with phosphate slurry to produce liquid phosphoric acid and the solid gypsum crystals are impounded. The phosphoric acid is then either combined (i) with anhydrous ammonia to produce various dry granular fertilizers, or (ii) further concentrated to produce liquid fertilizer products containing no ammonia. Sulfuric acid is used in the process and is either manufactured at the Conda plant or purchased from third party sources.

3. FACILITY / AREA CLASSIFICATION

Agrium is defined as a major facility in accordance with IDAPA 58.01.01.008.10 *Rules for the Control of Air Pollution in Idaho* (Rules) because the facility has a PTE for PM₁₀, SO₂, CO and NO_x of over 100 T/yr for each pollutant. Agrium is defined as a Tier I Source in accordance with IDAPA 58.01.01.008.104 for Tier I permitting purposes. Agrium is defined as a designated facility in accordance with IDAPA 58.01.01.006.006.27 (sulfuric acid plant). The AIRS classification is "A" because the facility has the PTE of over 100 T/yr of a regulated air pollutant. The SIC code for this facility is 2874 which is defined as a phosphate fertilizer production plant.

The Agrium facility is located within AQCR 61 and Universal Transverse Mercator Zone 12. The facility is located in Caribou County, which is designated as attainment or unclassifiable for all criteria air pollutants (i.e. SO₂, NO_x, CO, PM₁₀) and lead.

4. APPLICATION SCOPE

On May 30, 2003, the Department received an application from Agrium to terminate PTC No. 0029-0003, issued on August 7, 1992, for the Experimental Silica Plant and to revise the facility Tier I operating permit upon PTC termination. The basis of the request is that the Experimental Silica Plant no longer operates and there are no plans for its future use. On August 20, 2003, the Department notified Agrium that the PTC was terminated. This Tier I Administrative Amendment action to remove Section 7 of the operating permit for the Experimental Silica Plant is a result of the PTC termination.

5. PERMITTING ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this Tier I Administrative Amendment action.

5.1 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to the revisions made in this Tier I permit amendment.

IDAPA 58.01.01.381 Administrative Permit Amendments

This action meets the criteria for an Administrative permit amendment because the changes involve removal of a terminated Permit to Construct for the Experimental Silica Plant which is no longer in effect. The applicable requirements from the PTC have been identified as Section 7 of the Tier I permit and have been removed.

5.2 Fee Review

At the time of this action, Agrium had paid all applicable registration fees in accordance with IDAPA 58.01.01.387.

6. PERMIT CHANGES

This section summarizes all changes/revisions made to the Tier I operating permit issued on October 28, 2002.

Front Page – New Permit Number

The permit number has been changed from 029-00003 to T1-030319. The AIRS facility number is 029-00003.

Permit Issuance and Expiration Dates

A new permit issuance date is given to reflect the new amended permit. The original permit expiration date of October 28, 2006 remains in effect.

Permit Condition 1.23

A typographical error was found in the fluoride limit referenced as 0.03 pounds of fluoride per ton of P_2O_5 in Permit Condition 1.23. The condition was corrected to 0.3 pounds of fluoride per ton of P_2O_5 as defined in IDAPA 58.01.01.751.01.

Permit Condition 5.8

The condition following Permit Condition 5.7 was missing the numbering label of 5.8.

Section 6 – Summary Description

A typographical error was corrected in the summary description section for the Wet Process Phosphoric Acid Plant. The third paragraph, last sentence of the summary description was changed as follows:

“The purified phosphoric acid (PPA) process converts green acid (27% P_2O_5) produced by the phosphoric acid plant to food-grade PPA (61% P_2O_5) with a solvent extraction process. The PPA plant is not subject to the MACT requirements because it does not use methyl isobutyl ketone (MIBK) as a solvent in the process.”

Permit Condition 6.15.3 & 6.16.3

Typographical errors were corrected in Permit Conditions 6.15.3 & 6.16.3. The error was "cf" and was corrected to "of" in each section.

Section 7 – Permit Conditions 7.1 thru 7.12 - Experimental Silica Plant

Section 7 entitled "Experimental Silica Plant" has been removed from the permit based on the termination of PTC No. 029-00003 issued on August 7, 1992. The PTC termination was made effective in a DEQ letter issued on August 20, 2003 to Agrium. Section 7 of the Tier I permit is now "Reserved".

Permit Condition 8.13.1

This permit condition is listed twice in the permit. The second condition listed as 8.13.1 was mis-labeled and corrected to 8.13.3.

Permit Condition 8.18.1

The condition listed as 8.18.1 is actually a paragraph of Permit Condition 8.18. Therefore, the numbering label of 8.18.1 was removed.

General Provisions 21.1 and 21.4

General Provision 21.1 was revised to remove language referring to the permit issuance date. General provision 21.4 was revised to include the periodic compliance certification submittal deadline date as November 28 of each year.

General Provision 24 and 24.1

General provision 24 was revised to remove language referring to the permit issuance date. General provision 24.1 was added to clarify the semiannual report submittal dates for the facility as May 28 and November 28 of each year.

End changes.

7. PUBLIC COMMENT/EPA REVIEW

This Tier I administrative amendment does not require notice to the public or affected States as described in IDAPA 58.01.01.381.02.c. A copy of the final revised permit will be provided to EPA Region 10.

8. RECOMMENDATION

Based on the review of the application materials, and all applicable state and federal regulations, staff recommend that DEQ issue a final amended Tier I operating permit No. T1-030311 which replaces the original Tier I operating permit No. 029-00003 issued on October 28, 2002.

MS/sd Permit No. T1-030319